

CLAIMS:

1. A method of forming a capsule assembly which includes radiation-reactive dental restorative material comprises:

providing a container having an exterior surface and an interior chamber, the container formed from a laser-enhanced polymer and formed to inhibit the transmission of light radiation of selected wavelengths therethrough;

exposing selected portions of the exterior surface of the container to laser generated radiation at an energy level sufficient to create indicia on the exterior surface, the indicia having a sufficient contrast relative to the exterior surface to enable readily visual human and/or optical machine-readable detection of the indicia; and

inserting radiation-reactive dental restorative material into the interior chamber of the container,

wherein the indicia, at least in part, identify characteristics of the radiation-reactive dental restorative material within the container,

wherein the laser-enhanced polymer forming the container is inert relative to the radiation-reactive dental restorative material within the container, and

wherein the ability of the container to dispense the radiation-reactive dental restorative material under pressure is not adversely affected by the exposure of the container to laser generated radiation when creating the indicia on the exterior surface of the container.

2. The method of claim 1 wherein the indicia include an optically machine-readable bar code.

3. The method of claim 1 wherein the indicia include one or more letters, numerals, symbols, or reverse images thereof.
4. The method of claim 1 wherein the exposing step comprises activating an Nd:YAG laser.
5. The method of claim 1 wherein the providing step comprises forming the container to be black.
6. The method of claim 1 wherein the providing step comprises forming the container to inhibit the transmission of light radiation having a wavelength ranging from 370 nm to 530 nm.
7. The method of claim 1 wherein the container has a discharge nipple extending therefrom, and wherein the exposing step comprises creating a raised protrusion on an exterior surface of the discharge nipple as a result of exposure to the laser generated radiation.
8. The method of claim 7 wherein the exposing step comprises creating a plurality of raised protrusions on the exterior surface of the discharge nipple.
9. The method of claim 7 wherein the creation of the indicia and the protrusion occur during a single pass of laser generated radiation across the container.
10. The method of claim 7, and further comprising:
mounting a flexible tubular cap over the discharge nipple so that
portions of the tubular cap stretch to fit over the discharge

nipple and the raised protrusion, wherein the raised protrusion aids in retaining the tubular cap in place on the discharge nipple.

11. The method of claim 1 wherein the indicia is raised relative to the exterior surface of the container sufficient to readily enable manual tactile detection thereof.

12. The method of claim 1, and further comprising:
producing a plurality of containers such as those defined in the
providing step; and
exposing portions of the exterior surfaces of each
of the containers in the plurality of containers to the laser
generated radiation, during a single pass of laser
generated radiation, to create the indicia on each
container, wherein different indicia are created on selected
containers.

13. A method of forming a capsule assembly which includes
radiation-reactive dental restorative material comprises:
providing a container having an exterior surface and an interior
chamber, the container formed from a laser-enhanced
polymer and formed to inhibit the transmission of light
radiation of selected wavelengths therethrough, and the
container having a first open end and a second end with a
discharge nipple thereon, with the discharge nipple having
an orifice therethrough in communication with the interior
chamber of the container;

exposing selected portions of the exterior surface of the discharge nipple to laser generated radiation at an energy level sufficient to create a raised protrusion on the discharge nipple;

inserting radiation-reactive dental restorative material into the interior chamber of the container through the first open end of the container;

sealing the first open end of the container; and

mounting a removable cap over the discharge nipple, the cap being flexible to cover and seal the orifice, and the cap engaging the protrusion on the discharge nipple to inhibit inadvertent separation of the cap from the discharge nipple.

14. The method of claim 13 wherein the exposing step comprises creating a plurality of raised protrusions on the exterior surface of the discharge nipple.

15. The method of claim 13, and further comprising:

exposing selected portions of the exterior surface of the container to laser generated radiation at an energy level sufficient to create indicia on the exterior surface, the indicia having a sufficient contrast relative to the exterior surface to enable readily visual human and/or optical machine-readable detection of the indicia.

16. The method of claim 15 wherein the creation of the indicia and the creation of the protrusion occur during a single pass of laser generated radiation across the container.

17. The method of claim 15, and further comprising:
producing a plurality of containers such as those defined in the
providing step; and
exposing portions of the exterior surfaces of each of the
containers in the plurality of containers to the laser
generated radiation, during a single pass of laser
generated radiation, to create the protrusion and indicia on
each container.
18. The method of claim 17, and further comprising:
creating different indicia on selected containers in the plurality of
containers which are exposed to the laser generated
radiation during the single pass of laser generated
radiation.
19. A method of assembling two component parts comprises:
providing a first component part which is elongated, has an
orifice therethrough, has an exterior surface extending
about the orifice, and is formed from a laser-enhanced
polymer;
providing a second component part which is formed to resiliently
extend over the elongated portion of the first component
part bearing the orifice;
exposing the exterior surface of the first component part to laser
generated radiation at an energy level sufficient to create a
protrusion thereon; and
resiliently expanding the second component part over the exterior
surface and protrusion on the first component part to

cover and seal the orifice thereof, with the protrusion on the first component part engaging the second component part to inhibit inadvertent separation of the two component parts.

20. The method of claim 1 wherein the indicia contrast has a Brightness Scaled Contrast of at least 50.